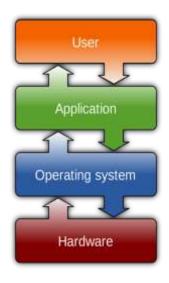# SNS COLLEGE OF TECHNOLOGY

(Autonomous)
COIMBATORE-35

APPLICATION I/O INTERFACE

APPLICATION I/O INTERFACE

- I/O system calls encapsulate device behaviors in generic classes

- Device-driver layer hides differences among I/O controllers from kernel

- New devices talking already-implemented protocols need no extra work

- Each OS has its own I/O subsystem structures and device driver frameworks

- Devices vary in many dimensions
  - **Character-stream** or **block**
  - **Sequential** or **random-access**
  - **Synchronous** or **asynchronous** (or both)
  - **Sharable** or **dedicated**
  - **Speed of operation**
  - **read-write**, **read only**, or **write only**

References

1. Silberschatz, Galvin, and Gagne, "Operating System Concepts", Ninth Edition, Wiley India Pvt Ltd, 2009.
2 .   Andrew S. Tanenbaum, "Modern Operating Systems", Fourth Edition,   Pearson Education, 2010.

Summarization